CENTER FOR DRUG EVALUATION AND RESEARCH

APPLICATION NUMBER: 21-166

MICROBIOLOGY REVIEW

REVIEW FOR HFD-580

OFFICE OF NEW DRUG CHEMISTRY MICROBIOLOGY STAFF HFD-805 Microbiologist's Review # 1 of NDA 21-166

March 17, 2000

A. 1. APPLICATION NUMBER: NDA 21-166

APPLICANT: Unimed Pharmaceuticals, Inc.

2150 E. Lake Cook Road

Suite 210

Buffalo Grove, IL 60089 (tel) 847-541-2525

2. PRODUCT NAME: Estrogel®

3. DOSAGE FORM: 17β-estradiol (0.06%) topical gel packaged in a plastic metered-dose pump.

4. METHOD OF STERILIZATION: None (non-sterile product).

5. PHARMACOLOGICAL CATAGORY and/or PRINCIPLE INDICATION: Indicated for the treatment of moderate to severe vasomotor symptoms in menopausal women.

B. 1. DATE OF INITIAL SUBMISSION: August 13, 1999

2. DATE OF CONSULT: November 10, 1999

3. DATE OF AMENDMENT: January 6, 2000

4. ASSIGNED FOR REVIEW: November 10, 1999

5. RELATED DOCUMENTS: DMF _____

C. REMARKS: A Letter of Authorization by Laboratories Besins Iscovesco, authorizing the Agency to reference DMF —, was provided in Attachment 4.5.1 of the 1/6/00 amendment. See Microbiologist's Review (dated 3/17/00) of DMF — for a review of preservative effectiveness validation.

D. CONCLUSIONS:

The application is recommended for approval for issues concerning microbiological product quality (microbial limits and preservative effectiveness testing). Specific comments are provided in section "E. REVIEW NOTES".

APPEARS THIS WAY ON ORIGINAL

Neal Sweeney, Ph.D.	-

CC:

Original NDA 21-166 HFD-580/Division File HFD-580/D. Spell-LeSane/R. Agarwal HFD-805/Consult File/N. Sweeney

Drafted by: Neal Sweeney, March 17, 2000 R/D initialed by P. Cooney, March 17, 2000

5 page(s) have been removed because it contains trade secret and/or confidential information that is not disclosable